

**A b s t r a c t**

In asynchronous optical packet switches, scheduling packets from a buffer randomly will cause less efficient utilization of the buffer. Additionally, reordering of  
5 packets may cause problems for service quality demanding applications. According to the present invention a new electronic buffer scheduling algorithm is proposed and a switch utilizing this algorithm is disclosed. The algorithm is designed for utilizing the buffer resources efficiently,  
10 still avoiding serious packet reordering.